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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,671	10/28/2003	Robert D. Ivarie	021396-000203US	6850

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EXAMINER

KAUSHAL, SUMESH

ART UNIT PAPER NUMBER

1633

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/696,671

Applicant(s)

IVARIE ET AL.

Examiner

Sumesh Kaushal Ph.D.

Art Unit

1633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20,21 and 28-49 is/are pending in the application.
- 4a) Of the above claim(s) 38-40,43-45 and 47-49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20,21,28-37,41,42 and 46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Applicant's response filed on 08/25/05 has been acknowledged.

*Claims 1-19 and 22-27 are canceled.*

*Claims 28-49 are newly filed.*

*Claims 20-21 and 28-49 are pending.*

*Applicants are required to follow Amendment Practice under revised 37 CFR §1.121. The fax phone numbers for the organization where this application or proceeding is assigned is 571-273-8300.*

### ***Election/Restrictions***

Applicant's election without traverse of Group IV claims 20-21 and 28-49, wherein the elected species is "Interferon" in the reply filed on 8/25/05 is acknowledged.

Claims 38-40, 43-45 and 47-49 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/25/05.

*Claims 20-21, 28-37, 41-42 and 46 are examined in this office action.*

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application

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by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 20-21, 28-37, 41-42 and 46 are rejected under 35 U.S.C. 102(e) as being anticipated by Speksnijder et al (US 5,897,998, 1999).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

The scope of invention as claimed encompasses a chicken egg containing an exogenous protein in the egg white.

Speksnijder teaches a method of manipulating avian eggs by making an opening in the egg-shell, without breaking the underlying egg shell membrane (see abstract). The cited art further teaches that an aqueous liquid is deposited over the opening such that the opening is completely covered. The cited art further teaches that the underlying egg-shell membrane is then cut away and a desired solution may be microinjected

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through the opening and the opening sealed without the introduction of any air bubble (col.5-6). The cited art teaches that the advantage of the invention is improved hatchability of fertilized eggs following manipulation (col.2 lines 40-50). The cited art further teaches that suitable eggs are avian eggs including, but not limited to, eggs of the ratite, chicken, turkey, quail, duck, pheasant and goose (col.2 lines 55-58). The cited art further teaches that the exogenous solution injected into the egg includes genetically modified cells, attenuated viruses, antigens, growth factors and cytokines (col.2 lines 59-67). Thus the cited art clearly anticipate the invention as claimed.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 34-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Boldt (US 4,296,134, 1981).

The instant claims are drawn to chicken egg white comprising a protein exogenous to the egg white.

Boldt teaches an egg product that comprises chicken egg white blended with milk proteins (NFDM) and soy proteins (col. 9-10). In addition NFDM naturally contains lactoferrin, which is inherently displays anti-microbial activity against various pathogens. Thus given the broadest reasonable interpretation the cited art clearly anticipate a chicken egg white comprising an exogenous protein.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Speksnijder et al (US 5,897,998, 1999) as applied to claims 20-21, 28-37, 41-42 and 46 above, and further in view of Sekellick et al (US 5,885,567, 1999).

The scope of invention as claimed encompasses a chicken egg or egg white containing an exogenous protein (interferon) in the egg white.

The teaching of Speksnijder has been described above. Even though Speksnijder teaches a chicken egg injected with an exogenous solution comprising genetically modified cells, attenuated viruses, antigens, growth factors or cytokines, the cited art does not teach an egg or egg white thereof containing interferon.

Sekellick et al teaches a preparation of recombinant interferon and its use to treat viral infections in fowl (col.5 lines 18-38, col.19-20).

Thus it would have been obvious to one ordinary skilled in the art at the time the instant invention was made to modify the invention of Speksnijder by substituting a cytokine with interferon in view of Sekellick. One would have been motivated to do so to prevent viral infections in developing eggs. One would have a reasonable expectation

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of success, since injection of a reagent of interest in an egg has been routine in the art at time the instant invention was made. Thus the invention as claimed is prima facie obvious in view of cited prior art of record.

### **Conclusion**

No claims are allowed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5,056,464, 1991; US 4903,635, 1990.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sumesh Kaushal Ph.D. whose telephone number is 571-272-0769. The examiner can normally be reached on Mon-Fri. from 9AM-5PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Nguyen can be reached on 571-272-0731.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to **571-272-0547**. For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

-sk



**SUMESH KAUSHAL  
PATENT EXAMINER**